

## Education of Nurse Anesthetists

There are five accredited nurse anesthesia training programs in North Carolina, all of which award a Master of Science in Nursing (MSN) with a concentration in nurse anesthesia. The programs are located at Duke University, East Carolina University, and three collaborative partnerships: the Carolinas HealthCare System/University of North Carolina at Charlotte, Raleigh School of Nurse Anesthesia/University of North Carolina at Greensboro, and Wake Forest University Baptist Medical Center/University of North Carolina at Greensboro.

CRNAs in the state are obtaining more advanced education with 73.1% of the workforce holding at least a baccalaureate degree in 2002, compared with 44.1% in 1992 [Figure 4]. This is partly due to changes in national requirements to become credentialed as a CRNA. The move to a masters degree from a post-RN clinical program has dramatically altered the educational composition of CRNAs in North Carolina. In 1992, the most common educational degree for CRNAs was a diploma (42.7%) and relatively few (8.1%) held a masters degree. By 2002, almost half of CRNAs held masters degrees (43.2%), and relatively few diploma-prepared CRNAs were practicing (19.2%). As the diploma-prepared CRNA workforce retires and new masters-prepared CRNAs enter the workforce, the trend toward holding advanced degrees will continue.

Significant differences exist in the educational preparation of CRNAs working in rural versus urban counties: CRNAs practicing in urban areas are more educated than those in rural areas. In 2002, nearly one-half of all CRNAs practicing in urban areas held a masters degree (47.1%) whereas a little more than one-fourth of rural CRNAs (27.2%) were masters-prepared [Table 1].

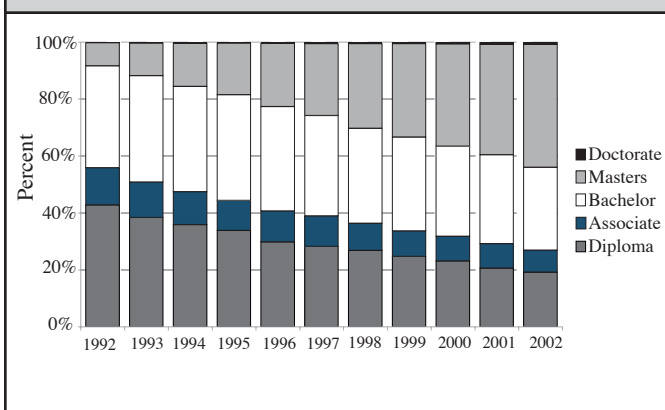
**Table 1: CRNAs by Highest Degree Held and Practice Location, North Carolina, 1992 and 2002**

	1992		2002	
Highest Degree	Urban	Rural	Urban	Rural
Diploma	41.5%	47.6%	18.0%	24.0%
Associate	12.4%	15.5%	7.2%	9.9%
Bachelor	36.5%	33.5%	27.0%	37.8%
Masters	9.4%	3.4%	47.1%	27.2%
Doctorate	0.2%	0.0%	0.7%	1.1%
<b>TOTAL</b>	100.0%	100.0%	100.0%	100.0%

Source: North Carolina Health Professions Data System, 2004.

Note: CRNAs with missing educational data excluded from percentages: 1992 (2).

**Figure 4: CRNAs by Highest Educational Attainment, North Carolina 1992-2002**



Source: North Carolina Health Professions Data System, 2004.

Note: CRNAs with missing educational data excluded from percentages: 1992 (2), 1993 (2), 1994-1998 (0), 1999 (8), 2000 (2), 2001-2002 (0).

## Changing Demographics in the Certified Registered Nurse Anesthetist Workforce

Compared with the total registered nurse workforce in North Carolina, males comprise a larger proportion of CRNAs. In 2002, less than 7% of registered nurses were male, compared with nearly 35% of CRNAs. The percentage of men in the CRNA workforce in North Carolina has changed little since 1992, when 29.7% of the workforce was male.

Nearly 30% of North Carolina's population in 2000 was non-white;<sup>2</sup> however, the CRNA workforce is not as diverse. The racial and ethnic mix of CRNAs has remained relatively

stable over the last 11 years; approximately 5.6% of the workforce was non-white in 2002. African Americans made up approximately 3% of the CRNA workforce in the state in 2002.

<sup>2</sup> United States Census Bureau, 2000.